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EXAMINER	
CHUNG, HOON J	
ART UNIT	**PAPER NUMBER**
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/520,675	CARRION-RODRIGO ET AL.	
	Examiner	Art Unit	
	HOON J. CHUNG	2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *January 11, 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-112* is/are pending in the application.

4a) Of the above claim(s) *1-56* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *57-112* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *January 11, 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☒ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *See Continuation Sheet*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :January 11, 2005 and February 21, 2008.

DETAILED ACTION

1. Please note that AU 2616 has been changed to AU 2416.

2. The amendments submitted on January 11, 2005 are entered by the examiner. Claims 1 – 56 are cancelled. Claims 57 – 112 have been added.

Priority

3. The foreign priority claim (foreign application 0216278.2 filed on July 12, 2002) filed on January 11, 2005 was not entered because the foreign priority claim was not filed during the time period set forth in 37 CFR 1.55(a)(1). For original applications filed under 35 U.S.C. 111(a) (other than a design application) on or after November 29, 2000, the time period is during the pendency of the application and within the later of four months from the actual filing date of the application or sixteen months from the filing date of the prior foreign application. For applications that have entered national stage from an international application filed on or after November 29, 2000, after compliance with 35 U.S.C. 371, the claim for priority must be made during the pendency of the application and within the time limit set forth in the PCT and the Regulations under the PCT. See 37 CFR 1.55(a)(1)(ii). If applicant desires priority under 35 U.S.C. 119(a)-(d), (f) or 365(a) based upon a prior foreign application, applicant must file a petition for an unintentionally delayed priority claim (37 CFR 1.55(c)). The petition must

be accompanied by (1) the claim (i.e., the claim required by 35 U.S.C. 119(a)-(d) and (f) and 37 CFR 1.55) for priority to the prior foreign application, unless previously submitted; (2) a surcharge under 37 CFR 1.17(t); and (3) a statement that the entire delay between the date the claim was due under 37 CFR 1.55(a)(1) and the date the claim was filed was unintentional. The Director may require additional information where there is a question whether the delay was unintentional. The petition should be addressed to: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Information Disclosure Statement

4. The information disclosure statements (IDS) submitted on January 11, 20905 and February 21, 2008 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Objections

5. Claim 110 is objected to because of the following informalities: in line 4, the phrase “further adapted to selected" should be changed to "further adapted to select". Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 65, 70 and 107 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 65, the claim recites the limitation "**the message**" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 70, the claim recites the limitation "**the at least two PDP contexts**" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 107, the claim recites the limitation "**the message**" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claim 84 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The phrase "**computer program product**" would be fairly conveyed to one of ordinary skill in the art as a "**produced computer**

program", which is not a process occurring as a result of executing the produced computer program, a machine programmed to operate in accordance with the produced computer program nor a manufacture structurally and functionally interconnected with the produced computer program in a manner which enables the produced computer program to act as a computer component and realize its functionality. It is also clearly not directed to a composition of matter.

10. Claim 111 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The phrase **"cause code"** would be fairly conveyed to one of ordinary skill in the art as a "**characters in digital format"**, which is non-statutory under 35 U.S.C. 101.

11. Claim 112 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The phrase **"cause code"** would be fairly conveyed to one of ordinary skill in the art as a "**characters in digital format"**, which is non-statutory under 35 U.S.C. 101.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 57, 59 – 60, 62, 66 – 67, 69, 71 – 72, 77 – 79, 84 – 88, 90 – 91, 93, 98 – 99, 101 – 103 and 106 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Sevanto et al. (WO 00/78080 A1, hereinafter Sevanto '080).

Regarding claim 57, Sevanto '080 discloses a method of establishing a communication for traffic between a user equipment (i.e. a mobile station, page 1, lines 10 – 11 of Sevanto '080) and a network (i.e. a fixed packet-switched network, page 1, lines 9 – 10 of Sevanto '080), comprising:

transmitting a communication connection request from the user equipment to a network element (page 6, lines 12 – 13 and figure 2a of Sevanto '080 disclose a mobile station transmitting an Activate PDP Context Request message through SGSN, and ultimately to a GGSN),

the request including an indication of a preferred communication connection (page 8, lines 14 – 17 of Sevanto '080 disclose QoS that is requested by the mobile station, in which the mobile station requests QoS based on the desired characteristics of the service);

receiving at least a part of said request at the network element (page 7, line 37 – page 8, line 2 of Sevanto '080 disclose SGSN transmitting a Create PDP Context Request message to a GGSN; a comparison of figure 3a, a message between a mobile station and a SGSN, and figure 3b, a message between the SGSN and a GGSN, of

Sevanto '080 disclose that the message between the SGSN and the GGSN includes a subset of the message between the mobile station and the SGSN);

selecting at the network element a communication connection for the traffic (page 8, line 33 – page 9, line 2 of Sevanto '080 disclose the GGSN establishing a tunnel based on the service attributes of the PDP Context Request message); and

communicating the selected communication connection (page 9, lines 15 – 16 of Sevanto '080 disclose the logical tunnel between the mobile station and the GGSN is established using the **specific service** of the activated PDP context)

to the user equipment (page 9, lines 5 – 6 of Sevanto '080 disclose the GGSN sending a Create PDP Context Response message back to the SGSN; page 9, lines 11 – 13 of Sevanto '080 disclose the SGSN sending a Activate PDP Context Accept message back to the mobile station, based on the message received from the GGSN, to activate a context; page 8, lines 14 – 17 of Sevanto '080 disclose a QoS Negotiated field, that can restrict the QoS further than what was requested by the mobile station, therefore, the actual accepted QoS must be sent to the mobile station, otherwise the mobile station will expect a higher QoS than the allocated QoS).

Regarding claim 59, Sevanto '080 discloses the method of claim 57, wherein the communication connection is a PDP context (page 2, lines 3 – 6 of Sevanto '080 disclose that setting up an active communication connection between a mobile station and a network requires a PDP context has to be activated between the mobile station and a GGSN).

Regarding claim 60, Sevanto '080 discloses the method of claim 59, wherein the step of communicating comprises transmitting a message to the user equipment identifying the selected PDP context (page 9, lines 5 – 6 of Sevanto '080 disclose the GGSN sending a Create PDP Context Response message back to the SGSN; page 9, lines 11 – 13 of Sevanto '080 disclose the SGSN sending a Activate PDP Context Accept message back to the mobile station, based on the message received from the GGSN, to activate a context; page 8, lines 14 – 17 of Sevanto '080 disclose a QoS Negotiated field, that can restrict the QoS further than what was requested by the mobile station, therefore, the actual accepted QoS must be sent to the mobile station, otherwise the mobile station will expect a higher QoS than the allocated QoS).

Regarding claim 62, Sevanto '080 discloses the method of claim 59, wherein the

step of selecting the PDP context is dependent upon the preferred PDP context (page 8, lines 14 – 17 of Sevanto '080 disclose the GGSN using the QoS requested by the mobile station to determine the QoS for the connection), and

the PDP contexts supported by the network (page 8, lines 15 – 17 of Sevanto '080 disclose the GGSN can restrict/negotiate QoS, which is stored in the PDP context, due to the system being overloaded, therefore certain QoS cannot be supported by the network).

Regarding claim 66, Sevanto '080 discloses the method of claim 59, wherein the step of selecting comprises determining the type of traffic to be transmitted on the PDP context (page 6, lines 20 – 22 of Sevanto '080 disclose various PDP types for different traffic protocols).

Regarding claim 67, Sevanto ‘080 discloses the method of claim 59, wherein the step of selecting comprises selecting a first PDP context for a first set of traffic type (i.e. IP) and selecting a second PDP context for a second set of traffic type (i.e. X.25; page 6, lines 20 – 22 of Sevanto ‘080).

Regarding claim 69, Sevanto ‘080 discloses the method of claim 59, wherein the traffic is signaling traffic (page 11, lines 10 – 14 of Sevanto ‘080 disclose a terminal, such as a mobile station, transmitting signaling information).

Regarding claim 71, Sevanto ‘080 discloses the method of claim 59, further comprising the step of receiving the PDP request from the user equipment at a further network element (figure 2a of Sevanto ‘080 discloses a SGSN that receives the PDP request from the UE), and

transmitting the PDP request from the further network element to the network element (figure 2a of Sevanto ‘080 discloses the SGSN transmitting the PDP request to a GGSN).

Regarding claim 72, Sevanto ‘080 discloses the method of claim 71, wherein the further network element removes the preferred PDP context from the request (figure 3a and 3b of Sevanto '080 disclose QoS REQ. from the SGSN and QoS NEG. from the GGSN, fields respectively, and the QoS NEG. field contains the negotiated QoS data sent by the SSGN to the GGSN, which can be different from the requested QoS by the mobile station),

such that the request transmitted from the further network element to the network element does not include an indication of a preferred PDP context (i.e. the requested QoS by the mobile station can be different from the negotiated QoS).

Regarding claim 77, Sevanto '080 discloses a method of establishing a PDP context (page 2, lines 3 – 6 of Sevanto '080 disclose that setting up an active communication connection between a mobile station and a network requires a PDP context has to be activated between the mobile station and a GGSN)

for signaling traffic between a user equipment (i.e. a mobile station, page 1, lines 10 – 11 of Sevanto '080) and a network (i.e. a fixed packet-switched network, page 1, lines 9 – 10 of Sevanto '080), comprising:

receiving a first PDP request from the user equipment (figure 2a of Sevanto '080 discloses a SGSN that receives the PDP request from the UE) at a first network element (i.e. the SGSN),

the PDP request including an identity of a preferred PDP context (page 7 lines 15 – 17 of Sevanto '080 disclose QoS that is requested by the mobile station, in which the mobile station requests QoS based on the desired characteristics of the service);

receiving a second PDP request from the first network element (figure 2a of Sevanto '080 discloses the SGSN transmitting the PDP request to a GGSN) at a second network element (i.e. the GGSN),

the second PDP request including at least part of the first PDP request (page 7, line 37 – page 8, line 2 of Sevanto '080 disclose SGSN transmitting a Create PDP Context Request message to a GGSN; a comparison of figure 3a, a message between

a mobile station and a SGSN, and figure 3b, a message between the SGSN and a GGSN, of Sevanto '080 disclose that the message between the SGSN and the GGSN includes a subset of the message between the mobile station and the SGSN);

selecting, at the second network element, a PDP context for the signaling traffic (page 8, line 33 – page 9, line 2 of Sevanto '080 disclose the GGSN establishing a tunnel based on the service attributes of the PDP Context Request message); and

confirming the selected PDP context (page 9, lines 15 – 16 of Sevanto '080 disclose the logical tunnel between the mobile station and the GGSN is established using the **specific service** of the activated PDP context)

to the user equipment (page 9, lines 5 – 6 of Sevanto '080 disclose the GGSN sending a Create PDP Context Response message back to the SGSN; page 9, lines 11 – 13 of Sevanto '080 disclose the SGSN sending a Activate PDP Context Accept message back to the mobile station, based on the message received from the GGSN, to activate a context; page 8, lines 14 – 17 of Sevanto '080 disclose a QoS Negotiated field, that can restrict the QoS further than what was requested by the mobile station, therefore, the actual accepted QoS must be sent to the mobile station, otherwise the mobile station will expect a higher QoS than the allocated QoS).

Regarding claim 78, Sevanto '080 discloses the method of claim 77, wherein the second PDP request includes the identify of the preferred PDP context (page 8, lines 14 – 17 of Sevanto '080 disclose the GGSN using the QoS requested by the mobile station to determine the QoS for the connection),

wherein the second network element selects the PDP context in dependence on the preferred PDP context (page 8, lines 14 – 17 of Sevanto '080),

and the PDP contexts supported by the network (page 8, lines 15 – 17 of Sevanto '080 disclose the GGSN can restrict/negotiate QoS, which is stored in the PDP context, due to the system being overloaded, therefore certain QoS cannot be supported by the network).

Regarding claim 79, Sevanto '080 discloses the method of claim 77, wherein the second PDP request does not include the identity of the preferred PDP context (figure 3a and 3b of Sevanto '080 disclose QoS REQ. from the SGSN and QoS NEG. from the GGSN, fields respectively, and the QoS NEG. field contains the negotiated QoS data sent by the SSGN to the GGSN, which can be different from the requested QoS by the mobile station),

wherein the second network element selects the PDP context in dependence on PDP contexts (page 8, lines 14 – 17 of Sevanto '080 disclose the GGSN using the QoS requested by the mobile station to determine the QoS for the connection)

supported by the network (page 8, lines 15 – 17 of Sevanto '080 disclose the GGSN can restrict/negotiate QoS, which is stored in the PDP context, due to the system being overloaded, therefore certain QoS cannot be supported by the network).

Regarding claim 84, Sevanto '080 discloses the method of claim 59, wherein a computer program product is used to store computer program code adapted to perform the methods (page 11, lines 28 – 31 of Sevanto '080 discloses the SGSN parsing

Activate PDP Context Request message by programming various operations in a memory in the form of machine-readable processing instructions; i.e. a computer).

Regarding claim 85, Sevanto '080 discloses a network element (i.e. a GGSN) for determining a communication connection for traffic between a user equipment (i.e. a mobile station, page 1, lines 10 – 11 of Sevanto '080) and a network (i.e. a fixed packet-switched network, page 1, lines 9 – 10 of Sevanto '080), comprising:

means for receiving a communication connection request from the user equipment (page 6, lines 12 – 13 and figure 2a of Sevanto '080 disclose a mobile station transmitting an Activate PDP Context Request message through SGSN, and ultimately to a GGSN);

means for selecting a communication channel for the traffic (page 8, line 33 – page 9, line 2 of Sevanto '080 disclose the GGSN establishing a tunnel based on the service attributes of the PDP Context Request message); and

means for communicating the selected communication (page 9, lines 15 – 16 of Sevanto '080 disclose the logical tunnel between the mobile station and the GGSN is established using the **specific service** of the activated PDP context)

to the user equipment (page 9, lines 5 – 6 of Sevanto '080 disclose the GGSN sending a Create PDP Context Response message back to the SGSN; page 9, lines 11 – 13 of Sevanto '080 disclose the SGSN sending a Activate PDP Context Accept message back to the mobile station, based on the message received from the GGSN, to activate a context; page 8, lines 14 – 17 of Sevanto '080 disclose a QoS Negotiated field, that can restrict the QoS further than what was requested by the mobile station,

therefore, the actual accepted QoS must be sent to the mobile station, otherwise the mobile station will expect a higher QoS than the allocated QoS).

Regarding claim 86, Sevanto '080 discloses the network element of claim 85, wherein the communication channel is a PDP context (page 2, lines 3 – 6 of Sevanto '080 disclose that setting up an active communication connection between a mobile station and a network requires a PDP context has to be activated between the mobile station and a GGSN).

Regarding claim 87, Sevanto '080 discloses the network element of claim 85, wherein the communication channel request includes an identity of a preferred communication channel (page 8, lines 4 – 9 of Sevanto '080 disclose PDP Type field, which indicates the communication protocol to be used requested by the mobile station).

Regarding claim 88, Sevanto '080 discloses the network element of claim 85, wherein the means for communicating is adapted to transmit a message (page 9, lines 15 – 16 of Sevanto '080 disclose the logical tunnel between the mobile station and the GGSN is established using the **specific service** of the activated PDP context)

to the user equipment identifying the selected PDP context (page 9, lines 5 – 6 of Sevanto '080 disclose the GGSN sending a Create PDP Context Response message back to the SGSN; page 9, lines 11 – 13 of Sevanto '080 disclose the SGSN sending a Activate PDP Context Accept message back to the mobile station, based on the message received from the GGSN, to activate a context; page 8, lines 14 – 17 of Sevanto '080 disclose a QoS Negotiated field, that can restrict the QoS further than

what was requested by the mobile station, therefore, the actual accepted QoS must be sent to the mobile station, otherwise the mobile station will expect a higher QoS than the allocated QoS).

Regarding claim 90, Sevanto '080 discloses the network element of claim 85, wherein the means for selecting one of at least two PDP contexts (page 6, lines 20 – 22 of Sevanto '080 disclose an IP PDP type, i.e. a general purpose PDP context; page 8, lines 14 – 17 of Sevanto '080 disclose QoS that is requested by the mobile station, in which the mobile station requests QoS based on the desired characteristics of the service, i.e. QoS related PDP context)

is responsive to the PDP contexts supported by the network (page 8, lines 15 – 17 of Sevanto '080 disclose the GGSN can restrict/negotiate QoS, which is stored in the PDP context, due to the system being overloaded, therefore certain QoS cannot be supported by the network).

Regarding claim 91, Sevanto '080 discloses the network element of claim 90, wherein the PDP request includes an identity of a preferred context (page 7 lines 15 – 17 of Sevanto '080 disclose QoS that is requested by the mobile station, in which the mobile station requests QoS based on the desired characteristics of the service),

the means for selecting being further responsive to the preferred PDP context (page 8, line 33 – page 9, line 2 of Sevanto '080 disclose the GGSN establishing a tunnel based on the service attributes of the PDP Context Request message).

Regarding claim 93, Sevanto '080 discloses the network element of claim 86, wherein the means for selecting comprises means for determining the type of traffic to

be transmitted on the PDP context (page 6, lines 20 – 22 of Sevanto '080 disclose various PDP types for different traffic protocols).

Regarding claim 98, Sevanto '080 discloses the network element of claim 86, comprising a gateway GPRS support node (page 7, line 37 – page 8, line 2 and figure 2a of Sevanto '080 disclose the SGSN transmitting a Create PDP Context Request message to a GGSN).

Regarding claim 99, Sevanto '080 discloses the network element of claim 98, wherein the means for requesting is connected to receive the PDP request from a serving GPRS support node (page 7, line 37 – page 8, line 2 and figure 2a of Sevanto '080 disclose the SGSN transmitting a Create PDP Context Request message to a GGSN).

Regarding claim 101, Sevanto '080 discloses a network element for determining a PDP context (page 2, lines 3 – 6 of Sevanto '080 disclose that setting up an active communication connection between a mobile station and a network requires a PDP context has to be activated between the mobile station and a GGSN)

for traffic between a user equipment (i.e. a mobile station, page 1, lines 10 – 11 of Sevanto '080) and a network (i.e. a fixed packet-switched network, page 1, lines 9 – 10 of Sevanto '080), comprising:

means for receiving a first PDP request from the user equipment (figure 2a of Sevanto '080 discloses a SGSN that receives the PDP request from the UE) at a first network element (i.e. the SGSN),

the first PDP request including an identity of a preferred PDP context (page 7 lines 15 – 17 of Sevanto ‘080 disclose QoS that is requested by the mobile station, in which the mobile station requests QoS based on the desired characteristics of the service);

means for receiving a second PDP request from the first network element (figure 2a of Sevanto ‘080 discloses the SGSN transmitting the PDP request to a GGSN) at a second network element (i.e. the GGSN),

the second PDP request including at least part of the first PDP request (page 7, line 37 – page 8, line 2 of Sevanto ‘080 disclose SGSN transmitting a Create PDP Context Request message to a GGSN; a comparison of figure 3a, a message between a mobile station and a SGSN, and figure 3b, a message between the SGSN and a GGSN, of Sevanto '080 disclose that the message between the SGSN and the GGSN includes a subset of the message between the mobile station and the SGSN);

the second network element including means for selecting a PDP context for the traffic (page 8, line 33 – page 9, line 2 of Sevanto '080 disclose the GGSN establishing a tunnel based on the service attributes of the PDP Context Request message); and

means for confirming the selected PDP context (page 9, lines 15 – 16 of Sevanto ‘080 disclose the logical tunnel between the mobile station and the GGSN is established using the **specific service** of the activated PDP context)

to the user equipment (page 9, lines 5 – 6 of Sevanto ‘080 disclose the GGSN sending a Create PDP Context Response message back to the SGSN; page 9, lines 11 – 13 of Sevanto ‘080 disclose the SGSN sending a Activate PDP Context Accept

message back to the mobile station, based on the message received from the GGSN, to activate a context; page 8, lines 14 – 17 of Sevanto '080 disclose a QoS Negotiated field, that can restrict the QoS further than what was requested by the mobile station, therefore, the actual accepted QoS must be sent to the mobile station, otherwise the mobile station will expect a higher QoS than the allocated QoS).

Regarding claim 102, Sevanto '080 discloses the network element of claim 101, wherein the second PDP request includes the identify of the preferred PDP context (page 8, lines 14 – 17 of Sevanto '080 disclose the GGSN using the QoS requested by the mobile station to determine the QoS for the connection),

the means for selecting being dependent upon the preferred PDP context (page 8, lines 14 – 17 of Sevanto '080), and

the PDP contexts supported by the network (page 8, lines 15 – 17 of Sevanto '080 disclose the GGSN can restrict/negotiate QoS, which is stored in the PDP context, due to the system being overloaded, therefore certain QoS cannot be supported by the network).

Regarding claim 103, Sevanto '080 discloses the network element of claim 102, wherein the second PDP request does not include the identity of the preferred PDP context (figure 3a and 3b of Sevanto '080 disclose QoS REQ. from the SGSN and QoS NEG. from the GGSN, fields respectively, and the QoS NEG. field contains the negotiated QoS data sent by the SSGN to the GGSN, which can be different from the requested QoS by the mobile station),

wherein the second network element selects the PDP context in dependence on PDP contexts (page 8, lines 14 – 17 of Sevanto '080 disclose the GGSN using the QoS requested by the mobile station to determine the QoS for the connection)

supported by the network (page 8, lines 15 – 17 of Sevanto '080 disclose the GGSN can restrict/negotiate QoS, which is stored in the PDP context, due to the system being overloaded, therefore certain QoS cannot be supported by the network).

Regarding claim 106, Sevanto '080 discloses the network element of claim 101, wherein the first network element is a SGSN (page 6, lines 12 – 13 and figure 2a of Sevanto '080 disclose a mobile station transmitting an Activate PDP Context Request message through SGSN), and

the second network element is a GGSN (page 7, line 37 – page 8, line 2 and figure 2a of Sevanto '080 disclose the SGSN transmitting a Create PDP Context Request message to a GGSN).

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

15. Claim 58 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sevanto et al. (WO 00/78080 A1, hereinafter Sevanto ‘080) in view of Crawley et al. (US Patent No. 5,953,312, hereinafter Crawley '312).

Regarding claim 58, Sevanto ‘080 does not explicitly disclose the method of claim 57, wherein an alternative communication connection is selected at the network element (i.e. GGSN of Sevanto ‘080) in the event that the preferred communication connection is not supported by the network.

Crawley ‘312 discloses an alternative communication connection being selected (column 1, lines 39 – 42 of Crawley ‘312 disclose determining a path containing one or more links without adequate resources to meet a QoS requirements)

in the event that the preferred communication connection is not supported by the network (column 1, line 42 of Crawley ‘312 discloses identifying an alternate path).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to select an alternate communication connection if the QoS requirements cannot be met by the preferred communication connection, since the modification, as suggested in column 1, lines 55 – 67 of Crawley ‘312, provides a system for identifying alternate paths requiring less time and computational resources than a conventional method (i.e. identifying an alternate path by considering every possible path through the network).

16. Claims 61, 63 – 65, 89 and 92 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sevanto et al. (WO 00/78080 A1, hereinafter Sevanto ‘080) in view of Puuskari et al. (WO 00/41401, hereinafter Puuskari ‘401).

Regarding claim 61, Sevanto '080 discloses the method of claim 59, wherein the step of communicating comprises, identifying the non-selected PDP context (page 8, lines 14 – 17 of Sevanto ‘080 disclose that the GGSN can restrict/negotiate QoS, which is stored in the PDP context, due to the system being overloaded; the QoS profile in the PDP context request message sent by the mobile station is different from the QoS profile in the returned message from the GGSN).

However, Sevanto '080 does not explicitly disclose transmitting a message to the user equipment identifying the non-selected PDP context (i.e. containing restricted/negotiated QoS).

Puuskari ‘401 discloses transmitting a message to the user equipment identifying the non-selected PDP context (page 3, lines 17 – 21 of Puuskari ‘401 disclose the GGSN transmitting the negotiated QoS to the mobile station).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to transmit a message to the user equipment identifying the negotiated QoS, since the modification, as suggested in page 3, lines 22 – 28 of Puuskari ‘401, allows the entire packet radio network to not have to be updated to support all new QoS mechanisms.

Regarding claim 63, Sevanto '080 does not explicitly disclose the method of claim 62, wherein the step of communicating comprises transmitting a message to the user equipment confirming that the preferred PDP context is selected.

Puuskari '401 discloses transmitting a message to the user equipment (page 3, lines 17 – 21 of Puuskari '401 disclose the GGSN transmitting the negotiated QoS to the mobile station),

confirming that the preferred PDP context is selected (page 12, lines 21 – 23 of Puuskari '401 disclose the GGSN returning the negotiated QoS to the SGSN; page 13, lines 14 – 17 of Puuskari '401 disclose the SGSN returning the negotiated QoS Profile, based on the negotiated QoS of the GGSN, to the mobile station).

There are two ways in which the mobile station determines if the requested QoS has been accepted: receiving an indication from the SGSN/GGSN that the requested QoS has been accepted, or assuming that the requested QoS has been accepted if an indication of rejection is not received. Hence, both methods provide a way to send a confirmation to the user equipment that the preferred PDP context is selected.

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to transmit a message to the user equipment confirming that the preferred PDP context is selected, since the modification, as suggested in page 3, lines 22 – 28 of Puuskari '401, allows the entire packet radio network to not have to be updated to support all new QoS mechanisms.

Regarding claim 64, Sevanto '080 does not explicitly disclose the method of claim 62, wherein the step of communicating comprises transmitting a message to the user equipment rejecting the preferred PDP context.

Puuskari '401 discloses transmitting a message to the user equipment (page 3, lines 17 – 21 of Puuskari '401 disclose the GGSN transmitting the negotiated QoS to the mobile station),

rejecting the preferred PDP context (page 12, lines 21 – 23 of Puuskari '401 disclose the GGSN returning the negotiated QoS to the SGSN; page 13, lines 14 – 17 of Puuskari '401 disclose the SGSN returning the negotiated QoS Profile, based on the negotiated QoS of the GGSN, to the mobile station; page 3, lines 20 – 21 of Puuskari '401 disclose that the mobile station either accepts the negotiated QoS profile or deactivates the PDP context, which means the mobile station has determined the requested QoS is rejected).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to transmit a message to the user equipment rejecting the preferred PDP context, since the modification, as suggested in page 3, lines 22 – 28 of Puuskari '401, allows the entire packet radio network to not have to be updated to support all new QoS mechanisms.

Regarding claim 65, Sevanto '080 does not explicitly disclose the method of claim 62, wherein a message identifies an alternative to the preferred PDP context.

Puuskari ‘401 discloses a message identifying an alternative to the preferred PDP context (page 3, lines 17 – 21 of Puuskari ‘401 disclose the GGSN transmitting the negotiated/alternative QoS to the mobile station).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to transmit a message identifying an alternative PDP context to the user equipment, since the modification, as suggested in page 3, lines 22 – 28 of Puuskari ‘401, allows the entire packet radio network to not have to be updated to support all new QoS mechanisms.

Regarding claim 89, Sevanto ‘080 discloses the network element of claim 85, wherein the means for communicating is adapted to identify the non-selected PDP context (page 8, lines 14 – 17 of Sevanto ‘080 disclose that the GGSN can restrict/negotiate QoS, which is stored in the PDP context, due to the system being overloaded; the QoS profile in the PDP context request message sent by the mobile station is different from the QoS profile in the returned message from the GGSN).

However, Sevanto '080 does not explicitly disclose transmitting a message to the user equipment identifying the non-selected PDP context (i.e. containing restricted/negotiated QoS).

Puuskari ‘401 discloses transmitting a message to the user equipment identifying the non-selected PDP context (page 3, lines 17 – 21 of Puuskari ‘401 disclose the GGSN transmitting the negotiated QoS to the mobile station).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to transmit a message to the user equipment

identifying the negotiated QoS, since the modification, as suggested in page 3, lines 22 – 28 of Puuskari '401, allows the entire packet radio network to not have to be updated to support all new QoS mechanisms.

Regarding claim 92, Sevanto '080 does not explicitly disclose the network element of claim 91, wherein the means for communicating is adapted to transmit a message to the user equipment confirming that the preferred PDP context is selected.

Puuskari '401 discloses transmitting a message to the user equipment (page 3, lines 17 – 21 of Puuskari '401 disclose the GGSN transmitting the negotiated QoS to the mobile station),

confirming that the preferred PDP context is selected (page 12, lines 21 – 23 of Puuskari '401 disclose the GGSN returning the negotiated QoS to the SGSN; page 13, lines 14 – 17 of Puuskari '401 disclose the SGSN returning the negotiated QoS Profile, based on the negotiated QoS of the GGSN, to the mobile station).

There are two ways in which the mobile station determines if the requested QoS has been accepted: receiving an indication from the SGSN/GGSN that the requested QoS has been accepted, or assuming that the requested QoS has been accepted if an indication of rejection is not received. Hence, both methods provide a way to send a confirmation to the user equipment that the preferred PDP context is selected.

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to transmit a message to the user equipment confirming that the preferred PDP context is selected, since the modification, as

suggested in page 3, lines 22 – 28 of Puuskari '401, allows the entire packet radio network to not have to be updated to support all new QoS mechanisms.

17. Claims 68 and 95 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sevanto et al. (WO 00/78080 A1, hereinafter Sevanto '080) in view of Koistinen et al. (US Patent No. 6,154,778, hereinafter Koistinen '778).

Regarding claim 68, Sevanto '080 does not explicitly disclose the method of claim 66, wherein the step of communicating includes communicating the allowed traffic types of the user equipment.

Koistinen '778 discloses communicating the allowed traffic types of the user equipment (column 2, lines 47 – 49 and lines 51 – 61 of Koistinen '778 disclose a client obtaining QoS specifications in response to transmitting a QoS specification request to a server, and choosing one of the available QoS specifications).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to communicate the allowed traffic types to the user equipment, since the modification, as suggested in column 1, lines 10 – 12 of Koistinen '778, provides a system for enabling utility-based multi-category quality-of-service negotiation in distributed systems.

Regarding claim 95, Sevanto '080 does not explicitly disclose the network element of claim 93, wherein the means for communicating is adapted to communicate the allowed traffic types of the user equipment.

Koistinen '778 discloses communicating the allowed traffic types of the user equipment (column 2, lines 47 – 49 and lines 51 – 61 of Koistinen '778 disclose a client obtaining QoS specifications in response to transmitting a QoS specification request to a server, and choosing one of the available QoS specifications).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to communicate the allowed traffic types to the user equipment, since the modification, as suggested in column 1, lines 10 – 12 of Koistinen '778, provides a system for enabling utility-based multi-category quality-of-service negotiation in distributed systems.

18. Claims 70, 81, 94, 96 – 97 and 105 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sevanto et al. (WO 00/78080 A1, hereinafter Sevanto '080) in view of Chen (US Pre-Grant Publication No. 2001/0053126 A1, hereinafter Chen '126).

Regarding claim 70, Sevanto '080 discloses the method of claim 59, wherein a general purpose PDP context (page 6, lines 20 – 22 of Sevanto '080 disclose an IP PDP type) can be used.

However, Sevanto '080 does not explicitly disclose using a dedicated signaling PDP context.

Chen '126 discloses using a dedicated signaling PDP context (page 1, paragraph 8 of Chen '126 discloses that existing protocols such as PDP Context Activation procedure is a signaling protocol).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to use a signaling PDP context, since the modification, as suggested in page 1, paragraph 11 of Chen '126, provides an alternative method of reserving resources in third of future generations of wireless mobile networks which has no or minimal impact on existing architecture.

Regarding claim 81, Sevanto '080 discloses the method of claim 78, wherein the selected PDP context includes a general purpose PDP context (page 6, lines 20 – 22 of Sevanto '080 disclose an IP PDP type).

However, Sevanto '080 does not explicitly disclose selecting a dedicated signaling PDP context.

Chen '126 discloses selecting a dedicated signaling PDP context (page 1, paragraph 8 of Chen '126 discloses that existing protocols such as PDP Context Activation procedure is a signaling protocol).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to select a signaling PDP context, since the modification, as suggested in page 1, paragraph 11 of Chen '126, provides an alternative method of reserving resources in third of future generations of wireless mobile networks which has no or minimal impact on existing architecture.

Regarding claim 94, Sevanto '080 discloses the network element of claim 86, wherein the means for selecting comprises means for selecting a first PDP context for a first set of traffic types and means for selecting a second PDP context for a second set of traffic types (page 8, lines 4 – 5 of Sevanto '080 disclose the PDP Type field being a

copy of the PDP Type field in the Activate PDP Context Request message; column 6, lines 20 – 22 of Sevanto ‘080 disclose the PDP Type field of the Activate PDP Context Request message identifying various protocols, such as IP, X.25 to choose from).

However, Sevanto ‘080 does not explicitly disclose selecting a PDP context for signaling types.

Chen '126 discloses using a signaling PDP context (page 1, paragraph 8 of Chen ‘126 discloses that existing protocols such as PDP Context Activation procedure is a signaling protocol).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to use a signaling PDP context, since the modification, as suggested in page 1, paragraph 11 of Chen '126, provides an alternative method of reserving resources in third of future generations of wireless mobile networks which has no or minimal impact on existing architecture.

Regarding claim 96, Sevanto ‘080 does not explicitly disclose the network element of claim 86, wherein the traffic is signaling traffic.

Chen '126 discloses the traffic being signaling traffic (page 1, paragraph 8 of Chen ‘126 discloses that existing protocols such as PDP Context Activation procedure is a signaling protocol).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to use a signaling PDP context, since the modification, as suggested in page 1, paragraph 11 of Chen '126, provides an

alternative method of reserving resources in third of future generations of wireless mobile networks which has no or minimal impact on existing architecture.

Regarding claim 97, Sevanto ‘080 discloses the network element of claim 86, wherein a general purpose PDP context (page 6, lines 20 – 22 of Sevanto ‘080 disclose an IP PDP type) can be used.

However, Sevanto ‘080 does not explicitly disclose using a dedicated signaling PDP context.

Chen '126 discloses using a dedicated signaling PDP context (page 1, paragraph 8 of Chen ‘126 discloses that existing protocols such as PDP Context Activation procedure is a signaling protocol).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to use a signaling PDP context, since the modification, as suggested in page 1, paragraph 11 of Chen '126, provides an alternative method of reserving resources in third of future generations of wireless mobile networks which has no or minimal impact on existing architecture.

Regarding claim 105, Sevanto ‘080 discloses the network element of claim 101, wherein the selected PDP context includes a general purpose PDP context (page 6, lines 20 – 22 of Sevanto ‘080 disclose an IP PDP type).

However, Sevanto ‘080 does not explicitly disclose selecting a dedicated signaling PDP context.

Chen '126 discloses selecting a dedicated signaling PDP context (page 1, paragraph 8 of Chen '126 discloses that existing protocols such as PDP Context Activation procedure is a signaling protocol).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to select a signaling PDP context, since the modification, as suggested in page 1, paragraph 11 of Chen '126, provides an alternative method of reserving resources in third of future generations of wireless mobile networks which has no or minimal impact on existing architecture.

19. Claims 73, 82 and 107 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sevanto et al. (WO 00/78080 A1, hereinafter Sevanto '080) in view of Uskela et al. (WO 01/47179 A1, hereinafter Uskela '179).

Regarding claim 73, Sevanto '080 does not explicitly disclose the method of claim 59, wherein the step of communicating includes transmitting a cause code or signaling flag.

Uskela '179 discloses transmitting a cause code (page 10, lines 22 – 25 of Uskela '179 discloses transmitting a cause code to the mobile station) or signaling flag.

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to transmit a cause code to a user equipment, since the modification, as suggested in page 2, lines 22 – 25 of Uskela '179, provides a method so that a receiver of a data packet can rely on the fact that the source address of the data packet indicates the real sender of the packet.

Regarding claim 82, Sevanto '080 does not explicitly disclose the method of claim 78, wherein the step of confirming comprises transmitting a cause code to the user equipment.

Uskela '179 discloses transmitting a cause code to the user equipment (page 10, lines 22 – 25 of Uskela '179 discloses transmitting a cause code to the mobile station).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to transmit a cause code to a user equipment, since the modification, as suggested in page 2, lines 22 – 25 of Uskela '179, provides a method so that a receiver of a data packet can rely on the fact that the source address of the data packet indicates the real sender of the packet.

Regarding claim 107, Sevanto '080 does not explicitly disclose the network element of claim 106, wherein a message is a cause code to the user equipment.

Uskela '179 discloses transmitting a cause code to the user equipment (page 10, lines 22 – 25 of Uskela '179 discloses transmitting a cause code to the mobile station).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to transmit a cause code to a user equipment, since the modification, as suggested in page 2, lines 22 – 25 of Uskela '179, provides a method so that a receiver of a data packet can rely on the fact that the source address of the data packet indicates the real sender of the packet.

20. Claims 74 – 76, 83, 100 and 108 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sevanto et al. (WO 00/78080 A1, hereinafter Sevanto '080) in view of

Lindgren et al. (US Pre-Grant Publication No. 2002/0002041 A1, hereinafter Lindgren '041).

Regarding claim 74, Sevanto '080 does not explicitly disclose the method of claim 57, wherein the communication request identifies an emergency connection request.

Lindgren '041 discloses the communication request identifying an emergency connection request (page 2, paragraph 30 of Lindgren '041 discloses the mobile station sending a PDP context request message, including an emergency indication, to the SGSN).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to identify a communication request as being an emergency connection request, since the modification, as suggested in page 1, paragraph 1 of Lindgren '041, provides a telecommunications network using IP that handles emergency calls.

Regarding claim 75, Sevanto '080 and Lindgren '041 disclose the method of claim 74, wherein the communication request identifies an emergency PDP context (page 2, paragraph 30 of Lindgren '041 discloses the mobile station sending a PDP context request message, including an emergency indication, to the SGSN).

Regarding claim 76, Sevanto '080 and Lindgren '041 disclose the method of claim 74, wherein the selection of the communication for the traffic is dependent upon a network policy (page 8, lines 14 – 17 of Sevanto '080 disclose that the GGSN can

restrict/negotiate QoS, which is stored in the PDP context, due to the system being overloaded).

Regarding claim 83, Sevanto '080 does not explicitly disclose the method of claim 77, wherein the preferred PDP context is an emergency PDP context.

Lindgren '041 discloses a preferred PDP context being an emergency PDP context (page 2, paragraph 30 of Lindgren '041 discloses the mobile station sending a PDP context request message, including an emergency indication, to the SGSN).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to identify a communication request as being an emergency connection request, since the modification, as suggested in page 1, paragraph 1 of Lindgren '041, provides a telecommunications network using IP that handles emergency calls.

Regarding claim 100, Sevanto '080 does not explicitly disclose the network element of claim 91, wherein the preferred communication channel is an emergency communication channel.

Lindgren '041 discloses a preferred communication channel being an emergency communication channel (page 2, paragraph 30 of Lindgren '041 discloses the mobile station sending a PDP context request message, including an emergency indication, to the SGSN).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to identify a communication request as being an emergency connection request, since the modification, as suggested in page 1,

paragraph 1 of Lindgren ‘041, provides a telecommunications network using IP that handles emergency calls.

Regarding claim 108, Sevanto ‘080 does not explicitly disclose the network element of claim 101, wherein the preferred PDP context is an emergency PDP context.

Lindgren ‘041 discloses a preferred PDP context being an emergency PDP context (page 2, paragraph 30 of Lindgren '041 discloses the mobile station sending a PDP context request message, including an emergency indication, to the SGSN).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to identify a communication request as being an emergency connection request, since the modification, as suggested in page 1, paragraph 1 of Lindgren ‘041, provides a telecommunications network using IP that handles emergency calls.

21. Claims 80 and 104 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sevanto et al. (WO 00/78080 A1, hereinafter Sevanto ‘080) in view of Le et al. (US Patent No. 6,230,005 B1, hereinafter Le ‘005).

Regarding claim 80, Sevanto ‘080 does not explicitly disclose the method of claim 79, wherein the selected PDP context is a default PDP context.

Le ‘005 discloses the selected PDP context being a default PDP context (column 8, lines 35 – 37 of Le ‘005 disclose activating/selecting a default PDP context, due to there being no means for the mobile station to specify PDP contexts; claim 79 claims the second network element removing the identify of the preferred PDP context,

therefore, the mobile station cannot send the preferred PDP context to the second network element).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to select a default PDP context, since the modification, as suggested in column 2, lines 8 – 10 of Le '005, provides a method and a system for preserving second generation switching while providing post-second generation services (i.e. 3g).

Regarding claim 104, Sevanto '080 does not explicitly disclose the network element of claim 103, wherein the selected PDP context is a default PDP context.

Le '005 discloses the selected PDP context being a default PDP context (column 8, lines 35 – 37 of Le '005 disclose activating/selecting a default PDP context, due to there being no means for the mobile station to specify PDP contexts; claim 79 claims the second network element removing the identify of the preferred PDP context, therefore, the mobile station cannot send the preferred PDP context to the second network element).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to select a default PDP context, since the modification, as suggested in column 2, lines 8 – 10 of Le '005, provides a method and a system for preserving second generation switching while providing post-second generation services (i.e. 3g).

22. Claims 109 – 110 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sevanto et al. (WO 00/78080 A1, hereinafter Sevanto '080) in view of Chen (US Pre-Grant Publication No. 2001/0053126 A1, hereinafter Chen '126) and Bell et al. (US Patent No. 5,659,542, hereinafter Bell '542).

Regarding claim 109, Sevanto '080 discloses a communication system including a service GPRS support node for receiving a PDP request from a user equipment (figure 2a of Sevanto '080 discloses a SGSN that receives the PDP request from the UE),

the PDP request including an identity of a preferred PDP context (page 7 lines 15 – 17 of Sevanto '080 disclose QoS that is requested by the mobile station, in which the mobile station requests QoS based on the desired characteristics of the service); and

a gateway GPRS support node for receiving a PDP request from the serving GPRS support node (figure 2a of Sevanto '080 discloses the SGSN transmitting the PDP request to a GGSN),

wherein the gateway GPRS support node is adapted to select a general purpose PDP context (page 6, lines 20 – 22 of Sevanto '080 disclose an IP PDP type) for traffic between the user equipment and the communication system,

in dependence upon the PDP contexts supported by the network (page 8, lines 15 – 17 of Sevanto '080 disclose the GGSN can restrict/negotiate QoS, which is stored in the PDP context, due to the system being overloaded, therefore certain QoS cannot be supported by the network; furthermore, it is possible that the GGSN cannot support an IP PDP type, which is requested by the mobile station, for example), and

to confirm the selected PDP context (page 9, lines 15 – 16 of Sevanto '080 disclose the logical tunnel between the mobile station and the GGSN is established using the **specific service** of the activated PDP context)

to the user equipment (page 9, lines 5 – 6 of Sevanto '080 disclose the GGSN sending a Create PDP Context Response message back to the SGSN; page 9, lines 11 – 13 of Sevanto '080 disclose the SGSN sending a Activate PDP Context Accept message back to the mobile station, based on the message received from the GGSN, to activate a context; page 8, lines 14 – 17 of Sevanto '080 disclose a QoS Negotiated field, that can restrict the QoS further than what was requested by the mobile station, therefore, the actual accepted QoS must be sent to the mobile station, otherwise the mobile station will expect a higher QoS than the allocated QoS).

However, Sevanto '080 does not explicitly disclose selecting a dedicated signaling PDP context for signaling traffic.

Chen '126 discloses selecting a dedicated signaling PDP context for signaling traffic (page 1, paragraph 8 of Chen '126 discloses that existing protocols such as PDP Context Activation procedure is a signaling protocol).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to select a signaling PDP context, since the modification, as suggested in page 1, paragraph 11 of Chen '126, provides an alternative method of reserving resources in third of future generations of wireless mobile networks which has no or minimal impact on existing architecture.

Furthermore, Sevanto '080 and Chen '126 do not explicitly disclose selecting an IP network for signaling traffic.

Bell ‘542 discloses selecting an IP network for signaling traffic (column 6, lines 25 – 29 of Bell ‘542 disclose that a natural packet protocol choice for a signaling channel is an IP protocol; column 10, lines 35 – 37 of Bell ‘542 disclose the signaling messages appearing as mere data to the information transport network or IP network).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to select an IP network for signaling traffic, since the modification, as suggested in column 10, lines 41 – 43 of Bell ‘542, provides a private network partitions to perform features without incurring charges for the features from the information transport network.

Regarding claim 110, Sevanto '080, Chen '126 and Bell '542 disclose the communication system of claim 109, wherein the gateway GPRS support node receives the PPD request from the serving GPRS node (figure 2a of Sevanto ‘080 discloses the SGSN transmitting the PDP request to a GGSN),

including the identity of preferred PDP context (page 6, lines 20 – 22 of Sevanto ‘080 disclose an IP PDP type being requested),

the gateway GPRS support node being further adapted to select the signaling PDP context (page 8, line 33 – page 9, line 2 of Sevanto '080 disclose the GGSN establishing a tunnel based on the service attributes of the PDP Context Request message),

in further dependence on the identity of the preferred PDP context (page 8, lines 33 – 36 of Sevanto '080 disclose the GGSN providing a service based on the contents of the PDP context activation request).

23. Claim 111 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sevanto et al. (WO 00/78080 A1, hereinafter Sevanto '080) in view of Chen (US Pre-Grant Publication No. 2001/0053126 A1, hereinafter Chen '126) and Uskela et al. (WO 01/47179 A1, hereinafter Uskela '179).

Regarding claim 111, Sevanto '080 discloses a communication system in which a PDP context is to be established for traffic between a user equipment (i.e. a mobile station, page 1, lines 10 – 11 of Sevanto '080) and a network (i.e. a fixed packet-switched network, page 1, lines 9 – 10 of Sevanto '080),

the PDP context being established by: receiving a PDP request from the user equipment at a network element (page 6, lines 12 – 13 and figure 2a of Sevanto '080 disclose a mobile station transmitting an Activate PDP Context Request message through SGSN, and ultimately to a GGSN);

selecting a general purpose PDP context for the traffic (page 6, lines 20 – 22 of Sevanto '080 disclose an IP PDP type); and

confirming the selected PDP context (page 9, lines 15 – 16 of Sevanto '080 disclose the logical tunnel between the mobile station and the GGSN is established using the **specific service** of the activated PDP context)

to the user equipment (page 9, lines 5 – 6 of Sevanto '080 disclose the GGSN sending a Create PDP Context Response message back to the SGSN; page 9, lines 11 – 13 of Sevanto '080 disclose the SGSN sending a Activate PDP Context Accept message back to the mobile station, based on the message received from the GGSN, to activate a context; page 8, lines 14 – 17 of Sevanto '080 disclose a QoS Negotiated field, that can restrict the QoS further than what was requested by the mobile station, therefore, the actual accepted QoS must be sent to the mobile station, otherwise the mobile station will expect a higher QoS than the allocated QoS).

However, Sevanto '080 does not explicitly disclose selecting a dedicated signaling PDP context for the traffic.

Chen '126 discloses selecting a dedicated signaling PDP context for the traffic (page 1, paragraph 8 of Chen '126 discloses that existing protocols such as PDP Context Activation procedure is a signaling protocol).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to select a signaling PDP context, since the modification, as suggested in page 1, paragraph 11 of Chen '126, provides an alternative method of reserving resources in third of future generations of wireless mobile networks which has no or minimal impact on existing architecture.

However, Sevanto '080 and Chen '126 do not explicitly disclose a cause code for the communication system, in which the confirming of the selected PDP context to the user equipment is done (as disclosed by Sevanto '080) using the cause code.

Uskela ‘179 discloses a cause code for the communication system, in which the confirming of the selected PDP context to the user equipment is done (as disclosed by Sevanto ‘080) using the cause code (page 10, lines 22 – 25 of Uskela ‘179 discloses transmitting a cause code to the mobile station).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to transmit a cause code to a user equipment, since the modification, as suggested in page 2, lines 22 – 25 of Uskela '179, provides a method so that a receiver of a data packet can rely on the fact that the source address of the data packet indicates the real sender of the packet.

24. Claim 112 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sevanto et al. (WO 00/78080 A1, hereinafter Sevanto ‘080) in view of Chen (US Pre-Grant Publication No. 2001/0053126 A1, hereinafter Chen '126), Uskela et al. (WO 01/47179 A1, hereinafter Uskela ‘179) and Garcia-Martin (3rd-Generation Partnership Project Release 5 Requirements on the Session Initiation Protocol).

Regarding claim 112, Sevanto ‘080 discloses a communication system in which a PDP context activated by a network (page 9, lines 15 – 16 of Sevanto ‘080 disclose the logical tunnel between the mobile station and the GGSN is established using the **specific service** of the activated PDP context)

is indicated to a user equipment (page 9, lines 5 – 6 of Sevanto ‘080 disclose the GGSN sending a Create PDP Context Response message back to the SGSN; page 9, lines 11 – 13 of Sevanto ‘080 disclose the SGSN sending a Activate PDP Context

Accept message back to the mobile station, based on the message received from the GGSN, to activate a context; page 8, lines 14 – 17 of Sevanto ‘080 disclose a QoS Negotiated field, that can restrict the QoS further than what was requested by the mobile station, therefore, the actual accepted QoS must be sent to the mobile station, otherwise the mobile station will expect a higher QoS than the allocated QoS).

However, Sevanto ‘080 does not explicitly disclose the PDP context being a signaling PDP context.

Chen '126 discloses using a signaling PDP context (page 1, paragraph 8 of Chen ‘126 discloses that existing protocols such as PDP Context Activation procedure is a signaling protocol).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to use a signaling PDP context, since the modification, as suggested in page 1, paragraph 11 of Chen '126, provides an alternative method of reserving resources in third of future generations of wireless mobile networks which has no or minimal impact on existing architecture.

Furthermore, Sevanto ‘080 and Chen ‘126 do not explicitly disclose transmitting a cause code to a user equipment.

Uskela ‘179 discloses transmitting a cause code to a user equipment (page 10, lines 22 – 25 of Uskela ‘179 discloses transmitting a cause code to the mobile station).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to transmit a cause code to a user equipment, since the modification, as suggested in page 2, lines 22 – 25 of Uskela '179, provides a

method so that a receiver of a data packet can rely on the fact that the source address of the data packet indicates the real sender of the packet.

Furthermore, Sevanto '080, Chen '126 and Uskela '179 do not explicitly disclose the communication system being a 3GPP R5 communication system.

Garcia-Martin discloses a communication system being a 3GPP R5 (page 1, abstract of Garcia-Martin discloses supporting the Release 5 of the 3GPP IMS in cellular networks) communication system (page, 5, paragraph 7 of Garcia-Martin disclose that 3GPP cellular IP multimedia terminals use existing GPRS as a transport network for IP datagram, in which the terminals perform a Activate PDP Context procedure).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to support a 3GPP R5 communication system, since the modification conforms to well known standards.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HOON J. CHUNG whose telephone number is (571)272-4059. The examiner can normally be reached on Monday - Thursday, 8:00AM - 5:00PM, ALT. Fridays, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung Moe can be reached on (571)272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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